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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,881	10/24/2003	Sharone Gindel	884.422US2	1939
21186	7590	03/07/2005	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.			SNIDER, THERESA T	
P.O. BOX 2938			ART UNIT	PAPER NUMBER
MINNEAPOLIS, MN 55402			1744	

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/692,881

Applicant(s)

GINDEL, SHARONE

Examiner

Theresa T. Snider

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2005.  
2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18-27 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 18-20 and 24-26 is/are rejected.  
7) ☒ Claim(s) 21-23 and 27 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 18-20 and 24-26 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by The Admitted State of the Prior Art, as set forth on pages 2-3, figures 1-2 of specification (hereafter ASPA).

ASPA discloses a stage to hold a wafer (fig. 1, #102).

ASPA discloses an exposure slit (fig. 1, #104).

ASPA discloses projection optics to focus a beam through the slit (page 2, lines 24-26).

ASPA discloses at least one vacuum tube adjacent the slit (fig. 1, #106).

ASPA discloses a single opening formed in the vacuum tube (fig. 1, #105, it is noted that the use of 'comprising' does not exclude the presence of additional openings; perhaps amend to 'no more than one' or the like to exclude presence of additional openings).

With respect to claim 19, ASPA discloses the opening located at about the mid-point of the slit (fig. 1, #115).

With respect to claim 20, ASPA discloses the opening having a predetermined size and shape (fig. 1, #115).

With respect to claims 24-26, the ASPA would inherently provide for the claimed method.

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3. Claims 24-26 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Johnson.

Johnson discloses providing at least one vacuum tube (fig. 1, #28).

Johnson discloses forming a single opening in the tube (fig. 1, #28, opening at uppermost surface).

With respect to claim 25, Johnson discloses the opening have a predetermined size and shape (fig. 1, #28).

With respect to claim 26, Johnson discloses the opening to be about the mid-point of an exposure slit (fig. 1, #28, 14, and fig. 2, #14, slit where #22 passes).

4. Claims 24-25 are rejected under 35 U.S.C. 102(a,e) as being clearly anticipated by Kawasaki.

Kawasaki discloses providing at least one vacuum tube (fig. 1, #5).

Kawasaki discloses forming a single opening in the tube (fig. 1, #5).

With respect to claim 25, Kawasaki discloses the opening have a predetermined size and shape (fig. 1, #5).

#### ***Response to Arguments***

5. Applicant's arguments filed 1/10/2005 have been fully considered but they are not persuasive. Applicant urges that ASPA discloses a 'plurality' of holes, whereas claim is directed to a 'single' opening. This is not persuasive because the use of 'comprising' does not exclude

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the presence of additional openings; perhaps amend to 'no more than one' or the like to exclude presence of additional openings.

Applicant urges that Johnson fails to disclose 'an element of an integrated circuit manufacturing device'. This is not found persuasive because the claim is a method of forming an apparatus, not a specific method of using an apparatus. Therefore, the apparatus of the prior art has to be capable of performing a function similar to that of the claimed invention. Johnson discloses the claimed elements and also discloses use with integrated circuits (col. 1, lines 40-41). Applicant has failed to provide any reasoning why Johnson cannot structurally operate in a manner similar to the claimed invention.

Applicant urges that Kawasaki fails to disclose 'forming a single opening in that at least one vacuum tube at a selected location'. This is not found persuasive because the single opening (5a) is formed in the 'end location' of the vacuum tube.

#### *Allowable Subject Matter*

6. Claims 21-23 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: the prior art discloses an apparatus for manufacturing a semiconductor device having a stage, an exposure slit, projection optics, at least one vacuum tube adjacent the slit, formed with a single opening HOWEVER fails to disclose or fairly suggest a second vacuum tube adjacent the exposure slit on an opposite side of the slit than the first vacuum tube.

*Conclusion*

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

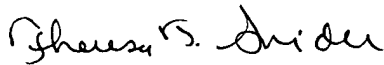
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T. Snider whose telephone number is (571) 272-1277. The examiner can normally be reached on Monday-Thursday (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Kim can be reached on (571) 272-1142. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**THERESA T. SNIDER  
PRIMARY EXAMINER**

Theresa T. Snider  
Primary Examiner  
Art Unit 1744

3/1/2005